

## PIERRE TCHAMABE BEng (Hons), Msc

39 Knights Court, Little Billing  
Northampton, NN3 9AT  
Mobil: +44 7812039441  
Email: [p.chamabe@yahoo.co.uk](mailto:p.chamabe@yahoo.co.uk)

### Personal Summary:

I am a multi-skilled, problem solver and innovative individual with 13 years' experience within Power Electronics. I possess good all-round ability and am able to manage and deliver multiple projects within deadline-driven environments. I'm a team player who is able to work well with colleagues of all levels and cultures or as an independent hands-on engineer.

My specialism lies in the field of Power Conversion and I have experience with analyzing customers' requirements and translating them into appropriate and engineering solutions.

### Tools and Frameworks:

- SIMetrix.
- Microsoft Office.
- Project Management Platform: 1, 2, 3, 5, and 6 Watts DC – DC Converters Products.
- Experienced in using power switched devices including IGBTs and MOSFETs.
- Maintaining the documentation as per PPAP/ISO/UL standards.
- Fault finding, soldering and diagnosis of faults to component level.
- Eager to learn and able to adapt to new challenges.

### Professional career to date:

#### **Murata Power Solutions, Milton Keynes**

##### **SENIOR DEVELOPMENT ENGINEER: October 2011 – Present**

Working as part of a team, I have developed and design dc-dc converters whilst adhering to appropriate parameters, specifications and safety standards. My role also entails:

- Currently designing a high efficient 1 Watt unregulated dc-dc converter with the LLC topology for Gates Drives Applications (IGBTs, MOSFETs, and SiC carbide).
- Designed and released 1, 2, and 3 Watts, unregulated/regulated dc-dc converter for industrials, distributed power systems, telecommunications applications, and 1 & 2 Watts 2xMOPPs for Full Medical and Gates Drives applications (IGBTs, MOSFETs, SiC carbide, and GaN).
- Designed and released a 3 Watts regulated dc-dc/ac-dc converter for industrials and telecommunications applications.
- Capable of designing and defining the required creepage, clearance and the distance through insulation (DTI) needed for basic/supplementary, and reinforced isolation in order to meet the IEC/UL62368-1 for ICT and AV Equipment, the ES60601-1 for Medical standard, and the IEC68100-5-1 for Motors Drives Applications.
- Always performing DFMEA in each design undertaking before prototypes built.
- Capable of designing the required input filter for EMC to meet both conducted and radiated emissions EN55022/FCC Class B.
- Constantly advising customers for which isolated converter to select for their gate drive for IGBT. It could be a single output dc-dc converter, but configure as dual output +15V and -9V or a normal dual output converter directly designed for the application.
- Successfully utilizing the Self Oscillating Push Pull Topology for low cost and small size to perform the unregulated dc-dc converter product.
- Designed regulated dc-dc converters products based on Self Oscillating Fly-back Topology in order to achieve low cost, less components count, and small size.
- Successfully designed transformers including cores material selection depending on the switching frequency of my design. I have also performed components selection based on their rating to meet IPC9252 standard.

- Collaborating with the Drawing Team (for PCB and Mechanical Drawing), Production/Mechanical Engineering and Test Engineering teams in order to meet the project date line and also to insure the customer satisfaction.
- Components searching and selections to bring the Bill of Materials (BOM) down and also dealing with Supply Chain for parts quotation.
- Dealing with customers' issues/requests and also investigating fault on failed products.

### **Wiper Solve Marine Ltd, South shield**

#### **GRADUATE INTERNSHIP: Jan 2011 – July 2011**

Electronic testing of Down-hole technology tools, data logging using customized software, and fault diagnosis down to component level using equipment such as DMMs, oscilloscope, signal generators, digital power supplies and frequency counters.

- Designed and constructed a control system of the straight line and pantograph wipers for marines.
- Installed, maintained and serviced straight line and pantograph wipers for the ships, including motor wipers (dc brush motor), CANbus control systems, park switch, heater, Main frame extrusion, pod, main cover, carriage plate and transmission mechanism, arms and blades.
- Strengthened my team working skill in providing support to the production and sales managers.

#### **Achievements:**

- Initiated a career's event for students from Africa at Huddersfield University in 2009 and taught them how to network and looking for the best options with regards to careers, further education, and training.
- Recognized as best mature student after obtaining BEng in 2009 for being able to manage family, work and school ahead of most of my much younger classmates.
- Awarded Leadership Certificate as a Stewardship Director by the Leeds Beeston Seventh Day Adventist church in 2010.

#### **Key skills and competencies:**

- **Critical thinker** – able to evaluate my own work and that of others, making judgments about the value of information and drawing conclusions from data.
- **Problem solver** – capable of working without “a right answer” and devising strategies to work towards a solution.
- **Leader and Contributor**– able to present work to colleagues, manage discussions and defend any position I assume, having the confidence to put forward ideas to seniors staffs.
- **Pro-active** – I have the confidence to make decisions and put them into action, not waiting for approval to do basic tasks, but reporting back responsibly at appropriate times.
- **Independent**– being able to work without close supervision; managing my own time and projects.
- **Bilingual** – I am able to communicate fluently using English and French.

#### **Academic qualifications:**

##### **BEng (Hons) Electronics and Electrical Engineering**

The University of Huddersfield 2006 – 2009

**Award: First Class.**

##### **MSc in Electrical Energy Conversion Systems**

University of Manchester 2009 – 2010

**Award: Merit.**